Protect Your Home and Family From

Wildfire

CENTRAL PINE BARRENS
JOINT PLANNING & POLICY COMMISSION

It's a warm, breezy day in the Central Pine Barrens, the fragrance of pine, sweet fern and bayberry filling the air from the patch of woods near your home. But the tranquil moment is interrupted by a more pungent smell. Outside your window smoke billows in the not-too-distant sky.

A wildfire is fast approaching.

What do you do? Are you ready?

Have you taken the proper precautions to protect your home and family?

If this is a situation you are not prepared for, this guide is for you. It provides everything you need to know about how to reduce the risk of losing your home to wildfire and keep your property, family and pets safe.

If we all take common sense precautions, we can make sure that this region is always known primarily for its spectacular beauty—and not for the occurrence of devastating wildfires.

A Special Place to Live, Work and Recreate

The Central Pine Barrens, the largest remaining natural area on Long Island, is a special place to live, work and enjoy incredible recreational opportunities. This globally-rare ecosystem is home to some of the rarest species of plants and animals found in New York State. At 106,000 acres, the region contains a rich mosaic of terrestrial and aquatic ecosystems, interconnected surface and groundwaters, historic buildings, farmlands and residential communities.

The protection of this region is especially important since it overlies an immense groundwater recharge area that provides 100% of the drinking water used by area residents, a sole source aquifer under federal protection.

Two of the four major rivers on Long Island, the Carmans River and Peconic River, have headwaters located within the region and offer recreational pleasures such as canoeing and fishing as well as spectacular scenic beauty.

There is a large diversity of wildlife inhabiting the Central Pine Barrens. Bald eagles, osprey, white-tailed deer, red fox, weasels, flying squirrels and turkeys are just a few examples of species that can be found in various locations.

More and more communities have been built adjacent to these natural areas, creating what is called a wildland urban interface (WUI). The proximity to these natural areas puts the residents of these communities at a higher risk of home damage and loss due to wildfire.

A better understanding of the role fire plays in the Central Pine Barrens and how wildfire and flying embers can ignite structures like your home can help you understand what actions you need to take to reduce your wildfire risk.

Fire in the Central Pine Barrens

More than 800 brush fires occur in Suffolk County every year, with most occurring in forests located in the Central Pine Barrens. Usually, these brush fires can be readily controlled and extinguished. However, given the right conditions, they can grow rapidly into large wildfires due to factors such as weather, fuel available to burn (vegetation and structures) and topography. Most of our fires are caused by human activity, whether accidental or intentional.

In the Central Pine Barrens there are two distinct fire seasons: early spring, from March to early June, and July through October. Generally, large fires in Long Island move from west to east following the prevailing westerly winds but may be subject to wind direction shifts caused by warm season sea breezes.

Pitch pine sprouting from base of tree after wildfire.

Periodic fires improve forest health by eliminating destructive invasive plants and insects and improving the safety of residential communities by removing accumulated dead, flammable vegetation in adjacent woodland areas.

Much of the vegetation in the Central Pine Barrens is fire-adapted and able to survive a wildfire by protective physical characteristics. The pitch pine, which is a dominant tree species in the region, has thick bark to protect it from fire and can sprout from under the bark plates to regrow after a fire.

Understanding Fire Behavior and How Fire Ignites Structures

Understanding wildfire movement and intensity (collectively called fire behavior) can help homeowners evaluate the fire hazard present on their property. Research has shown the most important factors that affect the ability of your home to survive a wildfire depends on fire intensity, vegetation characteristics and the materials used in the construction of your home (especially roofing). How a fire moves in the direction of a structure depends on fuel, topography and weather. In general, the relative intensity (amount of heat released) from a fire depends on whether it is a crown fire (one up in the treetops), surface fire or ground fire (below the surface) with crown fires being the most intense and difficult to control. Fire intensity and its movement toward a house can be reduced or slowed down by managing the amount of vegetation present on your property. Strategies for protecting homes from wildfires have been developed with these factors in mind.

Creating a Defensible Space to Protect Your Home

Wildfire safety does not mean you need to remove all vegetation on your property. It means carefully selecting and maintaining your vegetation to reduce the flames and heat that come near your buildings by creating a defensible space. This buffer area provides a safer area for firefighters to operate while protecting your home. The most extensive modification of vegetation should occur within an area of at least 30 feet around the house. Beyond this area, additional modification of wildland vegetation creates a larger buffer from an approaching wildfire and further decreases the risk of damage.

Scientific field research indicates embers and small flames are the primary ways most homes ignite and are lost due to a wildfire. Embers, burning pieces of airborne wood or vegetation, can be carried more than a mile by winds and can cause spot fires and ignite homes, debris and other objects. You can take action to help your home withstand the presence of embers and minimize the likelihood of flames or surface fire touching the home by using the Home Ignition Zone (HIZ) approach to manage your property, which focuses on how homes ignite from the effects of radiant heat and the condition of the home and everything surrounding it, up to 200 feet from the foundation.

Home in wildland urban interface area with defensible space showing edge of wildfire.

The HIZ is divided into three zones: Zone 1 (Immediate): 0 ft. to 5 ft.; Zone 2 (Intermediate): 5 ft. to 30 ft.; and Zone 3 (Extended): 30 ft. to 100 ft. (or property line). (Source: NFPA)

Preventing Fire From Entering and Igniting Your Home

Each spring before brush fire season starts in March, homeowners should take the time to examine their home from the chimney to the foundation to identify potential ember entry points and sources that embers can ignite. The types of materials used on your home, construction techniques and ensuring your home is well maintained all play important roles in protecting your home from the devastating effects of a wildfire.

Roof

The roof is the most vulnerable part of a house during a wildfire. Make sure it is in good condition and your roofing materials are Class A fire-rated (such as asphalt shingle, metal or tile). Screen any vents with 1/8-inch metal screening to keep flying embers and vermin out. The chimney should also have a cap. Clean out leaves and debris around skylights and solar panels. Replace plastic dome skylights with tempered glass.

Eaves, Soffits and Gutters

Enclose open eaves that can trap firebrands and allow them to enter your house. Soffits should have less than 1/8-inch-sized vent openings and be made of non-combustible material such as aluminum. Attic vents and other vents present should have 1/8-inch metal screening installed to prevent embers entering the house. Gutters and gutter guards should be metal and kept free of leaves and woody debris.

Windows

Windows should be double-paned and, preferably, made of tempered glass. Window trim should be made of non-combustible metal. Repair any cracked or broken windows. Keep vegetation trimmed down and away from windows, especially large picture or bay windows.

Siding

Make sure your siding is intact and has no holes or gaps. Consider changing combustible wood or vinyl siding to non-combustible brick, fiber cement board, stucco or aluminum.

Decks and Porches

Remove leaves and woody debris from on top of and below porches and decks. Do not store combustible materials, including propane tanks, below these areas. Remove cushions, rugs and other items if you are planning to be away from your home for extended time or if there is an impending wildfire. Enclose the area below raised decks and porches with non-combustible lattice backed with 1/8-inch metal screening or install a non-combustible skirt. Install non-combustible railings such as metal or other fire-resistant material especially where they attach to the house or install metal flashing between the house and railing.

Garage

Check to make sure your garage door has no gaps when closed and windows are intact with no cracks. Remove combustible materials and containers during fire season.

Fencing

Wood fencing attached to the house can act like a fuse and bring fire to the house, causing it to burn. To prevent this, install a non-combustible post or metal sheeting between the fence and the house or install a metal gate or section in the fence line to break the fire's path to the house.

Firewise Landscaping

Use fire-resistant plants, trees and shrubs in the Immediate and Intermediate Home Ignition zone areas. Make sure to space plants and trees correctly to reduce wildfires from spreading. Remember all plants will eventually burn given the right conditions.

There is no such thing as a fireproof plant. Fire-resistant plants still need to be watered and trimmed back to be the safest in the case of a fire.

Qualities to Look for in Fire-Resistant Plants

- A high moisture content in the leaves (as these ignite and burn more slowly). Deciduous trees are generally more fire resistant than evergreens because they have higher moisture content when in leaf.
- Little or no seasonal accumulation of dead vegetation
- Open branching (less fuel for fires)
- Fewer total branches and leaves (again, less fuel for fires)
- Slow growing, so less pruning is required (to keep open structure as noted above)
- Non-resinous material on the plant (i.e., stems, leaves, or needles that are not oily, resinous or waxy)

Qualities of Highly Flammable Plants

- Retain large amounts of dead material within the plant
- Produce a large volume of litter
- Contain volatile substances such as oils, resins, wax or pitch
- Produce stiff, leathery leaves or needles
- Maintain low moisture content in leaves

Highly flammable plants readily ignite from a flame or other ignition source. Do not place them adjacent to any structures and preferably not within 30 feet of the house.

Remember to use inert material such as rock or stone that won't burn instead of wood or rubber mulches around the home to create a buffer between the grass and foundation.

To obtain information on how to select more fire-resistant plants visit the Eastern United States Fire Performance Plant Selector.
http://www.fire.sref.info/

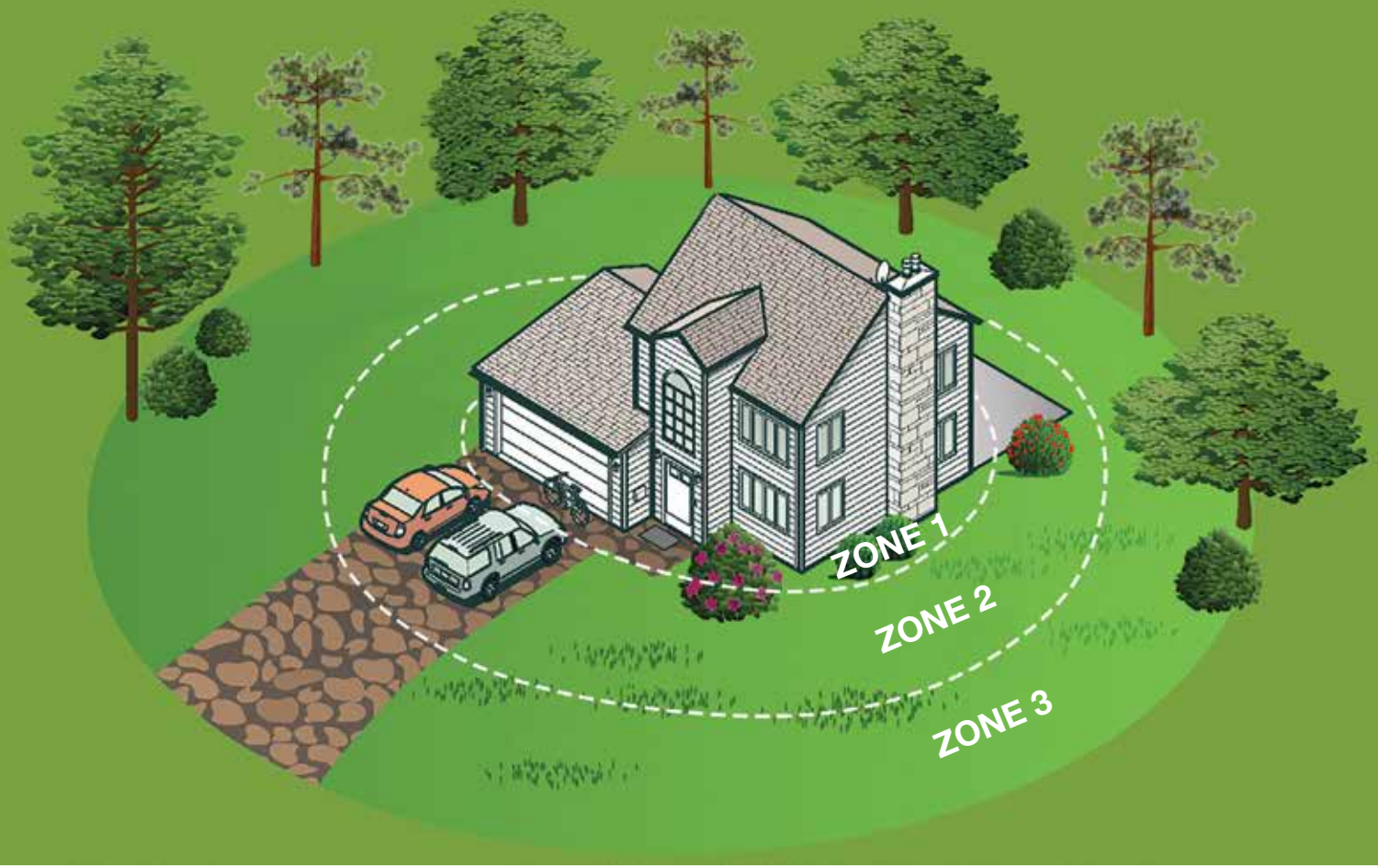
Additional Ways to Prepare

- Prepare a family communications plan; your family may not be all together when disaster strikes. Include an out-of-town contact that family members can check in with to let everyone know they are safe.
- Post emergency phone numbers by your landline and/or put into all family cell phones. Have an emergency contact identified in your cell phone by putting ICE (in case of emergency) next to their name in your contacts.
- Prepare an evacuation checklist and plan, include any pets and livestock. Make sure to practice this plan with your family.
- Put together an emergency bag with personal items including clothing, medications, insurance contacts, food for at least 3 days and other key items.
- Take photos or video of the contents inside your home and outbuildings such as sheds or barns for insurance purposes and store one copy offsite with a family or friend.

If a Wildfire Occurs

- Keep aware of the situation. Listen to local news on radio or television.
- Know where you will go if you need to evacuate.
- Keep pets together in one room and have cages and leashes ready in case of evacuation.
- Back your car into the driveway; have keys handy.
- When you need to evacuate close windows and doors.
- Turn off gas or propane at the meter or tank. Turn off pilot lights inside house.
- **Evacuate when told by emergency responders.**

Good Property Maintenance Helps Protect Your Home From Wildfire



Zone 1 (Immediate): *0 to 5 feet:* Keep wind-blown embers from igniting materials near your house. Place in this area non-combustible stone or gravel rather than wood mulches that can ignite. Use fire-resistant plants in this area such as succulents, perennials, annuals and deciduous shrubs rather than shrubs that have thick, resinous or waxy leaves or needles, such as evergreens. Remove dead leaves and woody debris. Prune tree branches back from the roof at least 10 feet.

Zone 2 (Intermediate): *5 to 30 feet:* Manage your landscape to prevent a wildfire from burning toward your house. Keep your lawn mowed to four inches high. Trees and shrubs should be placed in well-spaced islands or in clumps 10 to 20 feet apart. Remove dead trees, shrubs and dead material within plants. Prune trees six to 10 feet from the ground or shrubs underneath to prevent fire from climbing into treetops. For shorter trees, do not prune more than one-third of the overall tree height. Use non-combustible stone slabs, bricks or concrete pavers to create walkways or paths that break up the path of a fire travelling along the ground toward your house.

Zone 3 (Extended): *30 feet to 100 feet (or property line):* Manage vegetation to reduce the energy and speed of a wildfire and to force the fire from treetops to the ground. Remove and dispose of heavy accumulations of dead leaves, litter and woody debris on the ground. Remove or prune back vegetation adjacent to sheds or other outbuildings. Trim trees to have six to 12 feet between their canopies. Prune trees six to 10 feet from the ground or shrubs underneath to prevent fire from climbing into treetops. For shorter trees, do not prune more than one-third of the overall tree height. Check with local agencies for covenants or restrictions on your property for tree and vegetation removal that would require a permit or prior approval.

Source: NFPA, "Prepare your home for wildfire"

COMMUNITY WiSE

WILDFIRE IGNITION SAFETY EDUCATION

Additional Resources

Ready Set Go Program
https://www.readyforwildfire.org/

National Fire Protection Association
https://tinyurl.com/wildfire-nfpa

Central Pine Barrens Joint Planning and Policy Commission
624 Old Riverhead Road
Westhampton Beach, NY 11978
Telephone: 631-288-1079
Email: CommunityWise@pb.state.ny.us
https://tinyurl.com/cpbc-wildfire-prevention

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